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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,068	03/16/2001	Shigeru Hayakawa	000400-819	4710

7590 01/09/2004

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EXAMINER	
HO, THOMAS Y	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/809,068	Applicant(s) HAYAKAWA ET AL.
	Examiner Thomas Y Ho	Art Unit 3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 17-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 17-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 17-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsui US5642636.

As to claim 1, Mitsui discloses, a door lock system for a vehicle comprising: a latch mechanism 5,8 adapted to a vehicle door and latching the vehicle door to a vehicle body; an open link 26,36 engageable and disengageable with the latch mechanism (the open link is engaged to the latch mechanism only when tab 34 on the open link is driving the upper portion of the ratchet 8); a swing lever 53 connected to the open link; a rotatably mounted inside lever 33 positioned parallel to the open link and rotatable into engagement with the open link (the inside lever is rotatable into engagement with the open link when the inside lever is rotated clockwise to the unlocked position, and the left side 30 of rod 29 is driving the right portion of the slot 28 in the open link) to move the open link in a non-rotating manner and rotatable out of engagement with the open link (Figure 11); an electric driving source 45 having a gear member 47; and a rotary gear member 48 arranged between the swing lever and the electric driving source to be meshed with the gear member of the electric driving source, the rotary gear member being directly and engagably connected to the swing lever (the rotary gear member and the swing lever are engagably connected by pin 54 engaging slot 55).

As to claim 2, Mitsui discloses, wherein the open link 26,36 is arranged in a same plane as the swing lever 53 (the portion 52 of the swing lever engages a slot 57 in the open link, and so at least these portions of the swing lever and open link must be in the same plane).

As to claim 3, Mitsui discloses, further comprising: a housing 1 accommodating the open link 26,36, the swing lever 53, the electric driving source 45 and the rotary gear member 48 so that the swing lever and the rotary gear member are rotatably supported in the housing.

As to claim 4, Mitsui discloses, further comprising: an opening lever 35 perpendicularly arranged relative to the open link 26,36 (the opening lever 35 is perpendicularly arranged to the tab 34 of the open link 26,36).

As to claim 17, Mitsui discloses, wherein the housing 1 comprises a plurality of concave portions 51 (each corner of the slot 51 is a concave portion), the swing lever 53 including a projecting portion 54 selectively engageable with the concave portions (the projecting portion of the swing lever engages the rotary gear member 48, which in turn, engages the concave portions; therefore, the swing lever engages the concave portions through engagement to the rotary gear member).

As to claim 18, Mitsui discloses, a door lock system for a vehicle comprising: a rotatable latch 5 including a latch groove (near 13; Figure 1) for receiving a striker 2 of a vehicle body; a rotatable pawl 14 adapted to contact the latch to prevent rotation of the latch, including a unitarily rotatable element 35 that rotates unitarily with the pawl; an open link 26,36 adapted to contact the unitarily rotatable element (the bent tab 34 of the open link contacts the unitarily rotatable element) to rotate the unitarily rotatable element and the pawl so that the pawl is moved out of contact with the latch; a swing lever 53 connected to the open link; a rotatably mounted

inside lever 33 adapted to be operated through operation of a door handle (the key is a handle) so that the inside lever rotates into engagement with the open link upon operation of the door handle to move the open link in a non-rotating manner (the inside lever rotates into engagement with the open link when the inside lever is rotated to unlocked position by a key, wherein the left end 30 of the rod 29 drives the open link towards the right in Figure 1 by engaging the slot 28 in the open link) and rotates out of engagement with the open link upon release of the door handle; an electric driving source 45 having a gear member 47; and a rotary gear member 48 arranged between the swing lever and the electric driving source and in meshing engagement with the gear member of the electric driving source, the rotary gear member being directly connected to the swing lever.

As to claim 19, Mitsui discloses, wherein the unitarily rotatable element 35 includes a lifting lever 35 mounted on a shaft 9 that is integrally formed with a main body 8 of the pawl 14.

As to claim 20, Mitsui discloses, wherein the lifting lever 35 includes an engaging portion (the engaging portion is the portion of the lifting lever that contacts the bent tab portion 34 of the open link) contacted by an engaging portion 34 of the open link 26,36.

As to claim 21, Mitsui discloses, a door lock system for a vehicle comprising: a rotatable latch 5 including a latch groove (near 13) for receiving a striker 2 of a vehicle body; a rotatable pawl 14 adapted to contact the latch to prevent rotation of the latch, including a unitarily rotatable element 35 that rotates unitarily with the pawl; an open link 26,36 adapted to contact the unitarily rotatable element to rotate the unitarily rotatable element and the pawl so that the pawl is moved out of contact with the latch, the open link being shiftable between an unlocked position (the "UNLOCK" position shown in Figure 1) and a locked position (the positions

labeled as "LOCK" and "N" in Figure 1 are locked positions because in both positions the latch retains the striker 2); a swing lever 53 connected to the open link; a rotatably mounted inside lever 33 adapted to be operatively connected to a door handle (a key is a handle) to rotate in response to operation of the door handle, the inside lever having a part 29 engageable with an engaging portion 28 of the open link when the open link is in the unlocked position so that rotation of the inside lever resulting from operation of the door handle causes the open link to move in a non-rotating manner into contact (tab 34 on the open link contacts the unitarily rotatable element when the inside lever is rotated clockwise from the position shown in Figure 1) with the unitarily rotatable element; an electric driving source 45 having a gear member 47; and a rotary gear member 48 arranged between the swing lever and the electric driving source and in meshing engagement with the gear member of the electric driving source, the rotary gear member being directly connected to the swing lever, with operation of the rotary gear member moving the swing lever to shift the open link between the unlocked and locked positions.

As to claim 22, Mitsui discloses, wherein the open link 26,36 is shiftable between an unlocked position (labeled "UNLOCK" in Figure 1) and a locked position (labeled "LOCK" in Figure 1), the open link being engageable and disengageable with the latch mechanism 5,8 when the open link is in the unlocked position, the open link being unable to engage the latch mechanism when the open link is in the locked position (when the open link portion 36 is shifted to the locked position in Figure 11, the latch mechanism cannot be engaged by the open link tab 34 through use of the rotary gear member 48 and drive 45 because the connection between 39 and 40 is broken; col.4, ln.30-45).

As to claim 23, Mitsui discloses, wherein the open link 26,36 is shiftable between an unlocked position (labeled as "UNLOCK" in Figure 1) and a locked position (labeled as "LOCK" in Figure 1), the open link being adapted to contact the unitarily rotatable element 35 to rotate the unitarily rotatable element and the pawl 14 so that the pawl is moved out of contact with the latch 5 when the open link is in the unlocked position, the open link being unable to contact the unitarily rotatable element when the open link is in the locked position (when the open link portion 36 is shifted to the locked position in Figure 11, the latch mechanism cannot be engaged by the open link tab 34 through use of the rotary gear member 48 and drive 45 because the connection between 39 and 40 is broken; col.4, ln.30-45).

As to claim 24, Mitsui discloses, wherein the open link 26,36 is shiftable between an unlocked position (labeled as "UNLOCK" in Figure 1) and a locked position (labeled as "N" or "LOCK" in Figure 1), the open link being adapted to contact the unitarily rotatable element 35 to rotate the unitarily rotatable element and the pawl 14 so that the pawl is moved out of contact with the latch 5 when the open link is in the unlocked position, the open link being unable to contact the unitarily rotatable element when the open link is in the locked position (when the open link portion 36 is shifted to the locked position in Figure 11, the latch mechanism cannot be engaged by the open link tab 34 through use of the rotary gear member 48 and drive 45 because the connection between 39 and 40 is broken; col.4, ln.30-45).

As to claim 25, Mitsui discloses, wherein the swing lever 53 is provided with one of a pin 52 and a groove, and the open link 26,36 is provided with the other of the pin and the groove 57, said pin being positioned in the groove.

As to claim 26, Mitsui discloses, wherein the swing lever 53 is provided with one of a pin 52 and a groove, and the open link 26,36 is provided with the other of the pin and the groove 57, said pin being positioned in the groove.

As to claim 27, Mitsui discloses, wherein the swing lever 53 is provided with one of a pin 52 and a groove, and the open link is provided with the other of the pin and the groove 57, said pin being positioned in the groove.

As to claim 28, Mitsui discloses, wherein the swing lever 53 is provided with one of a pin 54 and a concave portion, and the rotary gear member 48 is provided with the other of the pin and the concave portion 55, the pin engaging the concave portion so that rotation of the rotary gear member results in rotation of the swing lever.

As to claim 29, Mitsui discloses, wherein the swing lever 53 is provided with one of a pin 54 and a concave portion, and the rotary gear member 48 is provided with the other of the pin and the concave portion 55, the pin engaging the concave portion so that rotation of the rotary gear member results in rotation of the swing lever.

As to claim 30, Mitsui discloses, wherein the rotary gear member 48 is an element separate from the swing lever 53 (the elements are separate levers joined by a pin and slot relationship).

As to claim 31, Mitsui discloses, wherein the rotary gear member 48 is an element separate from the swing lever 53.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsui US5642636 in view of Fukumoto US5306081, and further in view of cited case law.

As to claim 5, Mitsui discloses, further comprising: a concave portion 55 formed in the rotary gear member 48; and a pin 54 formed in the swing lever 53 and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member. The difference between the claims and Mitsui is the claims recite, a concave portion formed in the swing lever; and a pin formed in the rotary gear member and extending into the concave portion so that the pin engages the concave portion by the rotation of the rotary gear member (reversing the pin in slot relationship of Mitsui). Fukumoto discloses a device for a vehicle, similar to the vehicle of Mitsui. In addition, Fukumoto further teaches that it is equivalent to reverse the pin and slot relationship between two parts (col.16, ln.60-67). It would have been obvious to one of ordinary skill in the art, having the disclosures of Mitsui and Fukumoto before him at the time the invention was made, to modify the pin and concave portion of Mitsui to be reversed (placing the slot on the part that originally has the pin, while also placing the pin on the part originally having the slot), as in Fukumoto, to obtain a mirror-image pin and slot assembly. One would have been motivated to make such a combination because:

Inasmuch as the references disclose these elements as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

The reversal of components in a prior art reference, where there is no disclosed

significance to such reversal, is a design consideration within the skill of the art. In re Gazda, 219 F.2d 449, 104 USPQ 400 (CCPA 1955); In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 17-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y Ho whose telephone number is (703)305-4556. The examiner can normally be reached on M-F 10:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J Swann can be reached on (703)306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-1113.

TYH

James R. Brittain
Primary Examiner